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Fact Sheet

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Universal Waste Rules and How They Affect a Printer

The Universal Waste Rules (UWR's) were promulgated by U.S. EPA on May 11, 1995. The UWR's regulate and encourage recycling of hazardous waste nickel-cadmium and other batteries, certain types of waste pesticides, mercury containing thermostats and HID lamps (mercury vapor, metal halide, and high pressure-sodium).

The goal of the UWR's is to encourage resource conservation while adequately protecting human health and the environment; improving the EPA's current hazardous waste regulatory program and provide individuals and organizations incentives to collect unregulated portions of these waste streams and manage them the same way the regulated wastes are, thereby removing these wastes from the municipal waste stream (keep them out of the landfills). The Universal Waste classification can help reduce the amount of reportable hazardous waste a printer generates.

There are two types of universal waste handlers - Large quantity handlers and small quantity handlers of universal waste. These classifications are similar to the hazardous waste generator classifications. A small quantity handler of universal waste (SQHUW) is one that stores less than 5,000 Kg or about 11,000 lbs of universal waste (all types combined) on any given day during the calendar year; a large quantity handler of universal waste is one that stores greater than 5,000 Kg of UNIVERSAL WASTE on site. For the purpose of this fact sheet the focus will be on requirements applicable to "Small Quantity Handlers of Universal Waste (SQHUW) rules because it is unlikely that any printer in the United States would be classified as a LQHUW.

SQHUW means a person who *uses* batteries, pesticides, thermostats, and HID lamps, and who eventually decides they are no longer usable and thus are waste. Contractors or repair people who decide that these items are no longer usable and remove them from service are also considered handlers of universal waste.

SQHUW's are not required to notify EPA of their universal waste activities (no initial, annual, or biannual report required) and they are not required to obtain an EPA waste generator identification number as long as they do not store 5,000 Kg (~11,000 lbs) of universal waste on site at any given time. (40 CFR 273.32) Note, if a facility is generating other types of hazardous wastes they are still required to notify EPA and obtain an I.D. #.

SQHUW's are required to provide basic handling and emergency action information/training to employees who handle universal wastes. In the case of a release, handlers are required to immediately contain (prevent spread or additional spillage) and handle/neutralize residues appropriately. They are also required to comply with all OSHA employee handling and exposure regulations. These requirements are analogous to those currently required for small quantity generators of hazardous waste. Any training provided under other programs that meets any or all of the training requirements of Part 273 of RCRA regulations may be used to fulfill this requirement. You need only add a reference to 40 CFR Part 273 to the training documentation.

The amount of universal waste a printing facility generates does not count towards their monthly quantity of RCRA hazardous waste determination. In other words the amount of universal waste generated should not be counted towards the total amount of hazardous waste generated monthly. Universal waste does not impact your hazardous waste generator status.

Labeling Requirements - Universal waste is subject to DOT packaging and shipping label requirements, however when the waste does not require a hazardous waste manifest many of the DOT labeling requirements do not apply. Universal waste and/or containers of universal waste must be labeled at all times. The waste must be labeled as follows depending on the type of universal waste:

Fluorescent Lamps (mercury-vapor, metal halide & high-pressure sodium) - "Universal Waste - Mercury Containing Lamps"
Batteries - "Universal Waste - Battery(ies)", "Waste Battery(ies)", or "Used Battery(ies)".
Pesticide - "Universal Waste - Pesticide(s)" or "Waste Pesticide(s)"
Thermostats - "Universal Waste - Mercury Thermostat(s)", "Waste Mercury Thermostat(s)", or "Used Mercury Thermostat(s)"

Storage & Accumulation - Generators can accumulate waste on site for up to one year. Beyond one year the generator must prove to the EPA that the reason for storing the waste longer is for the sole purpose of facilitating proper recovery, treatment, or disposal of the waste (see 40CFR 273.15(b) & 273.35(b)).

Off-site shipments - Generators (SQHUW's) can take/send their universal waste only to a consolidation point, destination facility, or foreign destination. The generator (SQHUW) also must receive confirmation/approval from the receiving facility prior to sending the universal waste to their facility. (See 40CFR 237.18(a) and 273.38(a)).

The facility the universal waste is sent to (destination facility) whether it be for recycling or treatment and disposal, must be in compliance with 40CFR parts 264, 270, and 261.6(c)(2). In other words the destination facility must be properly permitted to accept the specific universal waste you are sending for treatment or recycling.

If a shipment of hazardous waste, which is not considered universal waste, is shipped to another handler or destination facility, the receiving facility is required to notify the regional EPA office immediately. The receiver is required to provide the name, address, & phone number of the shipper. The EPA will provide instructions for managing the hazardous waste should this occur.

Record keeping & Tracking - SQHUW's offsite shipments of universal waste do not require a hazardous waste manifest or other record keeping. Record keeping is required for LQHUW's. (See 40CFR 273.39 & 273.62) In general, it is recommended that simple documentation of quantities of universal waste shipped off site be maintained by SQHUW's in order to track/document your generator status. Under the universal waste regulations generators of universal waste still must comply with all of the land disposal restriction regulations found in 40CFR 268.

CESQG's & Universal Waste - Facilities who generate 220 lbs/month (<100 Kg) or less of universal waste have the option to manage their waste under the Conditionally Exempt Small Quantity Generator provisions of 40 CFR 261.5 rather than the universal waste regulations (or the full Subtitle C regulations).

Universal Waste Commonly Generated at a Printing Facility - The majority of Universal Waste generated by a printing facility will be mercury containing lamps/bulbs. However other universal wastes such as lead/acid batteries from industrial lift trucks, etc. may also be generated. Below is a table that references some of the common sources of Universal Waste at a printing facility.

Waste Description	Source
Mercury Containing Bulbs	Ambient Light Fixtures
Mercury Containing Bulbs	UV Curing Equipment
Lead/Acid Batteries	Lift trucks/equipment
Nickel/Cadmium Batteries	Phones, Radios, etc.
Lithium Batteries	Phones, Radios, etc.
Thermostats - Ambient Temp Controls (contain mercury)	Facility Maintenance
Thermostats (contain mercury)	Pre-press equipment

Determining & Handling Your Universal Waste Bulbs - If you are unsure whether the bulbs you are using contain mercury and are regulated by the Universal Waste rules the manufacturer or supplier can advise you. Many bulb manufacturers are now supplying environmentally preferable bulbs which are not considered hazardous, meaning they are not considered Universal Waste.

Most bulb recycling facilities specify preferred packaging for the bulbs. The most common request is to store and ship the bulbs in their original packaging. In fact some bulb recyclers offer discounts on handling and recycling fees if the bulbs are provided in their original package. Alternative, commonly high density plastic, bulb storage containers can be purchased as well. Additionally, if possible, it is best to keep the bulbs in tact (unbroken) so that the recycling facility can recover a greater percentage of the materials. Broken bulbs also create an increased environmental hazard because the mercury could easily leak out of the packaging the broken bulbs are stored in.

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